

CTPP 2000 Status Report

May 2002

U.S. Department of Transportation
Federal Highway Administration
Bureau of Transportation Statistics
Federal Transit Administration
In cooperation with the TRB Census Subcommittee

Release of long form data from Census 2000

Nanda Srinivasan, Cambridge Systematics Inc.

Two decennial long form related products are scheduled for release in the next few months.

Demographic Profiles:

The first release of long form data will be in May 2002, via Demographic Profile Sheets released at the geographic detail of state, county, and places. These sheets will contain demographic, social, economic, and housing characteristics presented in three separate tables. The publication will be available as Adobe PDF files via the internet, and as paper products available from your State Data Center (SDC).

Summary File 3 (SF 3)

Summary File 3 (SF 3) will be available from the Census Bureau beginning in June 2002. SF 3 contains small-area data from Census 2000 on subjects such as commuting, income, occupation, housing, and auto ownership.

...Continued on Page 4

Urbanized Area definitions

The Census Bureau plans to post definitions for the new urbanized areas and urban clusters by April 30, 2002. To access the information, please visit the Census Bureau website at: http://www.census.gov/geo/www/ua/ua_2k.html

Because the Census Bureau's new criteria for urbanized areas are considerably different from 1990, several new areas are expected to qualify as urbanized areas. Since TEA-21 mandates that all areas designated as urbanized areas must have a Metropolitan Planning Organization (MPO), some areas may need to form new MPOs. In other areas, existing MPOs may need to add new urbanized areas and subsequently modify their metropolitan planning area boundaries and governance.

More information will be posted on the FHWA Planning website at: http://www.fhwa.dot.gov/planning/census/

For More Information

SF 3: Starting in June 2002, you can access SF 3 data from the Census Bureau website: http://www2.census_gov/census_2000/datasets/

Demographic Profiles: For a template of the demographic profiles profiles, please visit: http://www.census.gov/population/cen2000/DP2-4.pdf

State Data Centers (SDC): You can obtain both SF 3 and demographic profiles from your local SDC. For SDC contact information, please visit: http://www.census.gov/sdc/www/

Page 2 May 2002

Status of CTPP Activities – April 2002

By Clara Reschovsky and Fabian Sanchez US Census Bureau

Disclosure Review Board Issues

The Census Bureau's Disclosure Review Board (DRB) and the Department of Transportation reached an agreement on the CTPP 2000 tabulation package. On January 28, 2002, the DRB issued a memorandum approving the latest proposal. The memo stipulates the specific guidelines that must be followed when generating the residence-based, workplace-based and workflow tabulations. These guidelines include rounding of the residence and workplace tables.

Thresholds will be applied to most of the worker flows. "Total Workers" and the "Means of Transportation by Vehicles Available" tables will not have a threshold. The other tables with variables such as "Poverty Status," "Minority Status," and "Income by Means of Transportation" will be subject to a threshold of 3 unweighted records, while the flow tables by variables such as worker earnings, industry, and occupation will have a threshold of 50 unweighted records. Having resolved these issues, we are now able to move forward with the contract for the CTPP package and begin to create it. Read on to find out more!

Computer Programming Services Contract

The CTPP 2000 Computer Programming Services contract was awarded on

January 25, 2002. The Census Bureau conducted the kickoff meeting on February 4, 2002. ITS Services Inc. programmers are hard at work on the CTPP 2000 profiles and tabulation package!

Look for your CTPP 2000 Profiles this fall!

The first product from the CTPP will be Profile Sheets highlighting selected transportation related variables from the Census 2000 long form. Some of the 2000 numbers will also be compared to the 1990 numbers. The Profiles for your area will be made available to you starting this fall. The profile sheets will show the information by state and county, and minor civil divisions (MCD) in the New England states.

State Combined Zones

The Census Bureau has finalized the instructions and participation form for the Combined Zone project for State DOTs. An electronic message was sent to the State DOTs in the first week of April explaining the program and asking if they wanted to participate in the program. As promised during the TAZ-UP program, the states will be allowed to aggregate MPO TAZs into larger zones for statewide modeling purposes. If there are not any TAZs, they can aggregate Tracts. A number of states are already signed up to participate. If you have any questions, please call Clara Reschovsky at (301) 457-2454.

Status of the American Community Survey (ACS)

By Lynn Weidman, Bureau of Transportation Statistics

The ACS will soon be coming to a house near you, according to a Federal Register notice published on January 16, 2002. For the full text of the notice, please visit: http://www.trbcensus.com/acs/notice011602 .rtf

Excerpts of the notice are reproduced below:

"In the past, the long-form data were collected only at the time of each decennial census. The American Community Survey will allow the Census Bureau to remove the long form from the 2010 Census, thus reducing operational risks, improving accuracy, and providing more relevant data..."

"The American Community Survey must begin full implementation in 2003 to provide comparable data at the census tract level by July 2008. These data are needed by federal agencies and others to provide assurance of long-form type data availability before eliminating the long form from the 2010 Census."

"For 2003-2005, the Census Bureau (CB) plans to conduct the American Community Survey in every part of the United States and also in Puerto Rico. In November 2002, the CB will begin full implementation of the American Community Survey by increasing the sample to a total of 250,000 residential addresses per month in the 50 states and the District of Columbia and 3,000 residential addresses per month in Puerto Rico."

"In addition to selecting a sample of residential addresses, the CB plans to select a sample of group quarters (GQs) and conduct the American Community Survey with a sample of persons within the GQs starting in January 2004."

I am aware of four comments from the transportation community submitted in response to this notice. Two issues are of general concern. The first is the quality of ACS estimates, especially for less populous areas, compared to the long form. Reasons for this include a smaller sample size, lower response rates, and possible differential response. The second is the lack of assurance that appropriate data products will be available, including CTPP-like tables. Contributing to this uncertainty is the disclosure restrictions that are now being applied to all Census Bureau data products, which resulted in changes being made to the originally requested set of CTPP 2000 tables. Other issues that are raised include: the use and interpretation of 5-year averages vs. single year long form estimates; master address file maintenance for use as a sampling frame and the quality of place-ofwork geocoding; the necessity of continued funding over time; and the need for a thorough evaluation of ACS multi-year estimates before killing the long form in 2010.

Due to concerns about ACS data expressed by the DOT and the transportation planning community, the CB and DOT have agreed to set up a joint committee to oversee comparison of American Community Survey test site estimates to those from the 2000 decennial long form, and to address long-standing issues about the estimation procedure and the quality of ACS data for small population geographies.

The content of the ACS questionnaire is currently identical to that of the 2000 long form. As part of the process to maintain that content for the full implementation, federal agencies have submitted to the CB citations from the Federal Code justifying the need for mandatory collection of the information from all the questions.

Page 4 May 2002

You can access the latest news through the "ACS Alert" newsletters on the CB website at

http://www.census.gov/acs/www/Special/Alerts/index.htm. To subscribe to the "ACS Alert", please fill their registration form online at:

http://lists.census.gov/mailman/listinfo/acsalert

Since the last CTPP status report there have been two releases of estimates from the ACS test sites. They contain a core set of tables for the 21 sites with populations of more than 65,000 and for all places within them meeting that threshold. An additional 700 tables are scheduled for release in the winter of 2002 for the ACS and the Census 2000 Supplementary Survey. The easiest way to access the data is through American Fact Finder at http://factfinder.census.gov/

Summary File 3 (Continued from page 1)

Some of the SF 3 tables in which you may be interested are:

Key Tables Summarized at the Block Group Level

P30. Means of transportation to work [16]

P31. Travel time to work [14]

P33. Aggregate travel time to work (in minutes) by travel time to work (4) by means of transportation to work [2]

P34. Time leaving home to go to work [16]

P35. Private vehicle occupancy [10]

P52. Household income in 1999 [16]

P151a-i. Household income in 1999 [16] by race/Hispanic origin (9)

H44. Tenure [2] by vehicles available [6]

H46. Aggregate number of vehicles available by tenure [2]

Key Tables Summarized at the Census Tract Level

Pct65a-i. Means of transportation to work for workers 16 years and over [16] by race/Hispanic origin (9) Hct33. Vehicles available (3) by race/Hispanic origin (9)

For more information on the table specifications for SF3, please visit: http://www.census.gov/population/www/cen2000/SF3-pop.html, and http://www.census.gov/population/www/cen2000/SF3-housing.html

Notes from the January 16, 2002 Meeting of the Subcommittee on Census Data for Transportation Planning

By Ed Limoges, Southeast Michigan Council of Governments (SEMCOG)

The Subcommittee on Census Data for Transportation Planning of the Committee on Urban Transportation Data and Information Systems (A1D08) met on January 16, 2002 during the Transportation Research Board Annual Meeting in Washington D.C. Approximately 40 people attended. The meeting was opened by Ed Christopher, FHWA, outgoing chair of the subcommittee (and new chair of A1D08).

Discussion then turned to the CTPP proposed tables, and to the ongoing discussions with the Census Bureau's Disclosure Review Board (DRB). Elaine Murakami, FHWA, observed that finalizing the CTPP is about half a year behind the original schedule. There was extensive discussion of the tables, especially the issue of number of mode categories for two-way tables.

Ernest Wilson, Census Bureau, gave a presentation on Census 2000 products and release schedule. Topics covered included: formats in which data will be available (printed reports, CD-ROMs/DVDs, and internet, especially American FactFinder); census data products, both traditional and new; data access software; and cost of data products.

Bob LaMacchia, Census Bureau, reported on the status of 2000 Urbanized Areas (UAs). The final criteria were subsequently published on April 15, 2002 (See page 1 for UA definitions). In response to a question, Bob stated that the CB will not address the issue of whether the actual road right-of-way of a UA boundary road is or is not part of the UA.

During a discussion of census geography, Bob LaMacchia pointed out that Public Use Microdata Areas (PUMAs) can follow tract, or place, or county boundaries. Tract-based PUMAs can create a problem for work place tabulations where place of work data is only coded to corporate boundaries. County-to-county commuting files are being discussed by the Census Bureau and the Bureau of Economic Analysis.

Nanda Srinivasan, Cambridge Systematics Inc., reported his work on a series of thematic maps using the Census 2000 Supplementary Survey (C2SS) and 1990 Census data. For more information, please visit-www.trbcensus.com/c2ss.html

Susan Sharp, of Sharp and Company Marketing Communications, discussed the CTPP outreach program, and showed the new CTPP video.

Phil Salopek, Census Bureau, gave an update on CTPP processing, schedule, and software. Place of residence data are scheduled to come out during October-December 2002, and place of work and flow data between February and April 2003. Data will come out on CDs, and later probably on DVDs. Ed Limoges, SEMCOG, discussed the extension of the place of work allocation system for CTPP 2000, used to assign workplace locations to ungeocodable workers.

Regarding future research, a key topic was examination of seasonality in American Community Survey (ACS) data, and a project to investigate the possibility of local involvement in ACS workplace coding on a continuous basis.

Bob Sicko, Mirai Associates, the new subcommittee chair, discussed plans for a Census poster session at the 2003 TRB Annual Meeting.

Page 6 May 2002

Use of CTPP files for Analysis of Metropolitan Area Multiple Nuclei

Roy C. Treadway
Department of Sociology-Anthropology
Illinois Sate University

While the Census Transportation Planning Package (CTPP) data are usually used for transportation planning purposes, these data can also be employed for basic theoretical analysis of metropolitan area structure. Over the past several years, I have used the CTPP files to examine, first, whether theoretically primary and secondary multiple nuclei of large and small metropolitan areas can be delineated and whether their relations in a network can be meaningfully examined. Second, from a practical perspective, I have been interested in identifying the major **cores** of urban areas which might be more meaningful as the center of core-based statistical areas, to be introduced in 2003 by the U.S. Census Bureau, than large political "central cities" or broad urbanized areas and urban clusters.

Thus, for my study, I used traffic analysis zones (TAZs) from the 1990 CTPP files from the small metropolitan areas of Bloomington-Normal, Springfield, and Kankakee, Illinois, and Clarksville, Tennessee and the large Chicago, Illinois, metropolitan area, consisting of eight counties. Because of several problems with the CTPP files, I adjusted for the important problem that not all workers were assigned to an actual TAZ of work but to default TAZs. I arbitrarily assigned those workers to an actual work TAZ proportionately to the number of workers working in each TAZ. These adjustments ranged from four to 34 percent.

To identify whether each TAZ was an employment rather than a residential subarea, I merged the residential and workplace files. Some of the TAZs had no workers, even workers living at home working in them, and these TAZs were thus

completely **residential** TAZs. In these metropolitan areas, between eight percent (Springfield) and 33 percent (Chicago) of the TAZs were completely residential. Other TAZs, which had workers **working** in them had no workers or no persons (including non-workers) **residing** in them; they were predominately or completely employment TAZs.

As a measure of the extent that a TAZ was more an **employment** subarea than a residential subarea, the ratio of the adjusted number of workers working in the TAZ to the number workers residing in the TAZ, called the Employmentresidence (ER) ratio was employed. Those TAZs with less than five workers residing in the TAZ were given special arbitrary values of the Employment-residence ratio to avoid having an inflated value because of a small denominator. If a TAZ with five or fewer workers **living** in it had five or fewer workers working in the TAZ, the Employment-residence ratio was assigned as 0 since the TAZ was clearly not a large employment subarea; while if the number of workers working in the TAZ were greater than five, the Employment-residence ratio was given a value of 10 since it was basically an employment TAZ. With additional experience from other metropolitan areas, a higher cut off of number of workers residing in the TAZ might be determined to be a more reasonable value.

According to the experience in the metropolitan areas studied, small subareas, such as TAZs, can be identified as being primarily employment subareas that might be used as the basis for identifying multiple nuclei of a metropolitan area. Some of the other TAZs with more workers working in them than workers residing in them might also be part of the nuclei of the metropolitan area, depending on the contiguity to the predominantly-employing TAZs and interaction with them.

For the TAZs in the Bloomington-Normal area, I was able to map the predominately **Worker** TAZ. All together, many widely separated nuclei exist, but the relationship between the nuclei in terms of developing a core for defining a metropolitan area is not clear from the analysis so far. In the Chicago area, I could identify some of the cores by mapping adjacent qualifying TAZ, as, for example, Chicago's loop, industrial and retail centers along arterial highways, and the downtowns of several suburbs.

In no metropolitan area was I able to determine satisfactorily what the cut-off value of the ER ratio that clearly distinguished the TAZs which were part of the nucleus of a metropolitan area from those which were not. In addition, I have not yet been able examine the importance of using contiguity or commuting among the TAZ to identify the actual extent or location of the primary and other nuclei of metropolitan areas. Should there be a

minimum number of workers in contiguous, combined employment subareas for them to be included in the multiple nuclei? To what extent does commuting between these employment subareas take place, and is some amount of interaction between noncontiguous employment subareas necessary for them to be a part of the nucleus of the same metropolitan area? Data on commuting between TAZs could be used to establish commuting criteria.

A paper, "Identifying Multiple Nuclei of Metropolitan Areas Using an Employment Approach" was presented in the session on "Spatial Demographic Analysis" at the meetings of the International Union for the Scientific Study of Population Conference, August 2001, in Salvador de Bahia, Brazil. A preliminary version of the paper without maps or graphs can be obtained at: http://www.iussp.org/Brazil2001/s20/S29_0/4_Treadway.pdf.

Meet the CTPP 2000 Working Group!

Outreach is a key component of CTPP 2000. Between June – September 2002 CTPP is included in the agenda at:

- 1. Texas MPO Planning Meeting, San Antonio, June 5-7, 2002.
- 2. ASCE Applications of Advanced Technology in Transportation Conference, August 5-7, 2002, Cambridge, MA.
- 3. 8th National TRB Conference on Transportation Planning for Small and Medium-Sized Communities, Cincinnati, Census Workshop on September 18, 2002.

We hope to see you there!

Page 8 May 2002

TRB Subcommittee: Message from the Chair(s)

This will be my last article as Chair of the TRB Subcommittee on Census Data for Transportation Planning. At our meeting this past January, I passed the gavel to Bob Sicko, formerly of Puget Sound Regional Council (PSRC). At PSRC, Bob was the Technical Services Program Manager and had extensive experience with census data products as well as the myriad of data used by the MPO. Bob is currently with Mirai Associates, a transportation planning consultant firm in the Puget Sound Area. I am confident that Bob's experience will bring an added dimension to Subcommittee.

Although I am stepping down, I am not stepping away. I will now chair the TRB **Urban Data and Information Systems** Committee, the parent of the Subcommittee. In addition, I am still very active in the development of the CTPP and other census data issues as they relate to transportation planning. For the Subcommittee, I will still maintain our website (http://www.trbcensus.com/) and our electronic listserve "ctpp-news". In fact, as we get closer to the final production of the CTPP and the full implementation of the American Community Survey (ACS) in November, 2002. I expect the listserve to continue to be a valuable resource. We currently have just over 740 subscribers.

On the ACS front there is some good news to report. At its recent project review meeting in April, the Standing Committee on Research of the American Association of State Highway and Transportation Officials selected "our" project to move forward. For those who might not remember, the Subcommittee and several of its friends have been actively pursuing a research project through the National Cooperative Highway Research Program (NCHRP) to look at the ACS to see if the transportation community can use it, how they would use it and what the data release package should look like. The next step will be for TRB staff to put together a panel to develop a

scope of services. This is expected to take place by the end of the summer. For an abridged copy of the proposal submitted by the subcommittee see http://www.TRBcensus.com/notes/nchrp_acs.html

As part of the TRB annual meeting this past January, the Subcommittee sponsored a "Sunday" workshop on the ACS. The workshop was divided into two main parts, a policy update followed by technical presentations and discussion. For the policy update we had Nancy Gordon, Associate Director for Demographic Programs for the Census Bureau and Susan Schechter from the Office of Management and Budget who brought the audience up to date on the planning and development of the ACS. We then heard from Catherine Lawson of the State University of New York at Albany, Chuck Purvis of the Metropolitan Transportation Commission in the San Francisco Bay Area and Ed Limoges from Southeast Michigan Council of Governments who presented the transportation community's concerns and needs. The last half of the workshop was dedicated to a technical discussion on the developments of the ACS with Chip Alexander and Nancy Torrieri of the Census. Elaine Murakami of FHWA also presented a brief overview of the NCHRP proposal as well as two other research projects that FHWA is advancing relative to the ACS. We are currently compiling our notes from the workshop and hope to have them posted on the website shortly. Let me also extend a special thanks to Stacey Bricka of NuStats and Bob Sicko (our new chair) for their work in organizing the workshop.

Before I close, I just wanted to say thank you all for letting me serve as chair of what I believe to be one of the most active groups within all of TRB. It has been everything that it should be - fun, exciting and challenging. With that said, let me pass the gavel to Bob.

Ed Christopher, Chair, TRB Urban Data Committee

A message from Bob Sicko...

I look forward to being the new chair of the Census subcommittee, especially with the many challenges the transportation community faces in the next few years. Being involved with the MPO transportation planning process has allowed me to better understand the importance of the data products developed by the Census Bureau. As chair, I will strongly promote the use of the CTPP and support the transition to the ACS. The key to promoting the CTPP is educating its current and potential users about the strengths and weaknesses of the data as well as the potential for integrating other Census products (PUMS, SF3) to create more robust data sets.

The 9th Conference on Applications of Transportation Planning Methods (scheduled for Baton Rouge, LA from April 6-10, 2003) will be an ideal location for in-depth discussions and review of the new Census data products. TRB in January 2003 will be too early for formal presentations using CTPP 2000, however, we will be able to discuss it at the subcommittee meeting.

It is great news to hear that the ACS proposal has been accepted by NCHRP. Judging by the many e-mail threads on our listserve, addressing the concerns and questions many have on the subject (not only in the transportation planning community!!), this will be an invaluable piece of research. The 2002 TRB workshop clearly showed the commitment of the Census Bureau to provide "the best" and most current datasets as well as their acknowledgment that they need our feedback to make their products as good as possible. I see the challenges of the transition to the ACS as opportunities that the planning community must step up to meet the many objectives that are before us.

Please let me know your comments and ideas for subcommittee activities.

Bob Sicko Mirai Associates Chair, TRB Sub-committee on Census Data for Transportation Planning

Some Interesting websites featuring Census data:

When planning to use Census data for your area, it may be worthwhile to go through examples of how some other agencies have used the data to display and showcase products. Here are a few examples we found while browsing the internet!

Agency Websites:

Case study on how OCTA uses GIS, with maps. http://tmip.fhwa.dot.gov/clearinghouse/docs/gis/octa/

Census data from the state of Louisiana http://www.state.la.us/popmaps.htm

Baltimore Metropolitan Council Census data maps http://www.baltometro.org/content.asp?id=17#mappingcensus

Maps from the Appalachian Center at the University of Kentucky http://www.uky.edu/RGS/AppalCenter/maps.htm

Social Science Data CollectionProgram at the University of California, San Diego http://ssdc.ucsd.edu/ssdc/cen2k.html

....Continued on page 10

Page 10 May 2002

Some interesting Websites (Continued from Page 9)

Vendor Websites:

Interactive mapping for the Census 2000:

http://barbera.caliper.com/maptitude/census2000maps/map.asp:

USA Today:

http://www.usatoday.com/news/census/index.htm

Claritas Inc.

http://cluster1.claritas.com/PL94/learn.wjsp#newmapping

CTPP Hotline – 202-366-5000

FHWA

Elaine Murakami

PH: 202-366-6971 (206-220-4460 in Seattle)

FAX: 202-366-7660

Email: elaine.murakami@fhwa.dot.gov

Nanda Srinivasan PH: 202-366-5021 FAX: 202-366-7742

Email: nanda.srinivasan@fhwa.dot.gov

Ed Christopher (Urban Data Committee

Chair)

PH: 708-283-3534 FAX: 708-283-3501

Email: edc@berwyned.com

FTA

Eric Pihl

PH: 202-366-6048 FAX: 202-493-2478

Email: eric.pihl@fta.dot.gov

Sarah Clements PH: 202-366-4967 FAX: 202-493-2478

Email: sarah.clements@fta.dot.gov

BTS

Lynn Weidman PH: 202-366-7245 FAX: 202-366-3640

Email: lynn.weidman@bts.dot.gov

AASHTO

Dave Clawson PH: 202-624-5839 FAX: 202-624-5806 Email: davidc@aashto.org

Census Population Division

Phil Salopek PH: 301-457-2454 Fax: 301-457-2481

Email: phillip.a.salopek@census.gov

Clara Reschovsky PH: 301-457-2454 FAX: 301-457-2481

Email: clara.a.reschovsky@census.gov

TRB Committees

Ed Christopher (Urban Data Committee

Chair)

See under FHWA

Bob Sicko (Census Subcommittee Chair)

Mirai Associates PH: 425-415-0905 FAX: 425-415-0935

E-mail: bob@miraiasscociates.com